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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Fredrik Alfried Fortier

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EXAMINER

MONDT, JOHANNES P

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,460	Applicant(s) FORTIER, FREDRIK ALFRIED	
	Examiner JOHANNES P. MONDT	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 30-54 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 30-53, drawn to a support arrangement.

Group II, claim 54, drawn to a method of supporting a vessel.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

(i) Claim 54 appears not to have an inventive step (see MPEP 1801, section II) at least for the following reason: Published Patent Specification GB 889,758 (made of record by applicant in Information Disclosure Statement February 15, 2006) discloses a method for supporting a vessel in the form of a core barrel 12 of a gas cooled nuclear reactor (lines 37-46; Figures 1 and 2) capable of being operated at high temperature, which is housed within a reactor pressure vessel 11 (lines 47-53), the core barrel generally cylindrical in shape (see Figure 2) and having an axis which extends generally vertically (Figure 1), the method characterized in that it includes transmitting weight of the core barrel and its contents to the reactor pressure vessel through a single vertical

Art Unit: 3663

support 14 (lines 47-53); and transmitting lateral loads between the core barrel and the reactor pressure vessel through a lateral support 13/20/19/17/15 which is positioned at or adjacent an upper end of the core barrel 12 (Figure 1) and which includes a plurality of circumferentially spaced upper lateral supports 20/19/17/15 each of which including a set of inner and outer lateral support members (bearing pads 15 and 17, respectively) (Figures 1 and 2 and lines 54-65) connected to the core barrel 12 and reactor pressure vessel 11, respectively, (loc.cit.). GB 889,758 does not teach the claimed “roller element sandwiched between the inner and outer lateral support members”; however, said inner and outer lateral support members 15 and 17 are in the design by GB 889,758 allowed to slide with respect to each other (lines 54-65), and hence it would not have been an inventive step to interpose a roller between the sliding elements 15 and 17 so as to reduce friction: see, e.g., Holmes (US 5,772,420), who, in a patent addressing a problem of contact between contacting bearing surfaces (see abstract), hence analogous to the technical feature of sliding bearing elements in GB 889,758, teaches that friction can be reduced by providing roller contact between the bearing surfaces (see col. 6, l. 23-26). Therefore, claim 54 lacks an inventive step, being obvious over GB 889,758 in view of Holmes (US 5,772,420), and hence has no special technical feature, let alone a special technical feature in common with claim 54.

(ii) In addition, claim 30 also lacks an inventive step, with reference to the discussion above of claim 54, in as far as lines 1-4 and 11-15 are concerned, whilst for lines 5-10 a “single vertical support” is met by skirt 14 in GB 889,758 (lines 47-53) with upper and lower support members connected respectively to the core barrel and to the

reactor pressure vessel between which the vertical loads are transmitted and positioned centrally about the central axis (symmetrically on each side thereof, hence providing central support). The limitation “relatively displaceable” is one of intended use, which is without patentable weight, since there is at least the capability of displacing said upper and lower support members one with respect to the other.

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

- Species a: support arrangement of claim 30 wherein at least one or both of the contact surfaces (50, 60) is curved (see Figures 1-12 and description on pages 7-15).
- Species b: support arrangement of claim 30 wherein the vertical support includes an intermediate member (202) between the upper and lower support members (see Figure 13 and description on pages 15-16).
- Species c: support arrangement of claim 30 wherein the upper lateral supports are positioned to support the core barrel laterally at or towards the upper end thereof.
- Species d: support arrangement of claim 30 wherein the roller includes at least one gear wheel having teeth, and at least one of the inner and outer upper lateral support members is provided with teeth which are complementary to those on the gear wheel (see especially Figure 9) .

Art Unit: 3663

- Species e: support arrangement of claim 30 in which at least one of the inner and outer upper lateral support members of each set is mounted on a resiliently deformable support (104) (see especially Figure 8).
- Species f: support arrangement of claim 30 in which the lateral support means includes a plurality of circumferentially spaced lower lateral supports (beams 312) (see especially Fig. 14 and page 17, lines 8+).
- Species g: support arrangement of claim 30 including auxiliary support means (130) for providing support to the core barrel when subject to loads in excess of “normal” operational loads (see especially Figure 14 and page 16, lines 25+).

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

- Species a: claims 30-34.
- Species b: claims 30 and 35-38.
- Species c: claims 30 and 39.
- Species d: claims 30, 40 and 41.
- Species e: claims 30 and 42-45.
- Species f: claims 30 and 46-48.
- Species g: claims 30 and 49-53.

The following claim(s) are generic: claim 30.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: as explained above, claim 30 has no special technical feature, because claim 30 lacks an inventive step. Therefore, none of the above-listed Species a through g share a special technical feature.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

6. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double

Art Unit: 3663

patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHANNES P. MONDT whose telephone number is (571)272-1919. The examiner can normally be reached on 7:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Johannes P Mondt/
Primary Examiner, Art Unit 3663